

**REMARKS**

By the above actions, claims 7, 9, 12 and 14 have been amended and claims 6, 8, 13 and 15 have been canceled, claims 7 and 12 constituting claims 8 & 13 rewritten in independent form and claims 9 & 14 have also merely been rewritten in independent form. In view of these actions and for the reasons set forth below, reconsideration and withdrawal of the currently pending rejections is requested.

The rejection of claims 6, 7 and 12 under 35 USC § 103 has been rendered moot by the actions taken above. Thus, only the rejection of claims 8-11 & 13-15 under 35 USC § 103 based on the disclosure of the Koji Japanese reference when viewed in combination with the Japanese reference to Sukeyoshi et al. and the U.S. patents to Shi et al. and Hiramoto et al. are commented upon.

The newly cited reference of Shi et al. relates to a CVD apparatus in which an organic polymer film deposited on a wafer surface is cured with UV light such as is emitted by a barrier discharge lamp (col. 4, l. 20). Shi et al. also disclose that the light transmitting window which is part of the lamp chamber can be heated in order to prevent condensation of the organic polymer. However, Shi et al. do not disclose a thick-film heater or a linear heater which are positioned on a surface of the receptacle window.

The publications to Hiramoto (US '158) and Sukeyoshi (JP '468) have already been discussed at length in applicants' previous response, to which the Examiner's attention is directed for the sake of brevity. Particularly, Hiramoto does not disclose providing of a heater on a lamp chamber window. The Examiner's "thick-film heater (19)" actually is the inner electrode of a dielectric barrier discharge lamp, and the "surface window (23, 24)" is the lamp tube. While the Examiner's comment to the effect that light from the light source inherently heats the window, however, it is pointed out that the claims of the present application require both a lamp *and* a heater on a receptacle window, so that any heating produced by the lamp is irrelevant and it is inappropriate to treat the lamp as constituting the claimed heater and the claimed window as well as the claimed lamp.

The Japanese reference to Sukeyoshi et al. describes two different heaters which are both for heating the wafer and not the window closing the lamp chamber. A first heater is provided in the wafer stage, and an auxiliary heater is arranged on the side, top and bottom

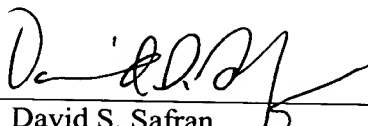
walls of the wafer chamber. Thus, the only part of the walls enclosing the wafer chamber which is not provided with a heating means is the window separating the lamp chamber from the wafer chamber. Consequently, it is completely incorrect to say that Sukeyoshi et al. have a heater to heat the window. Furthermore, there is no basis in Sukeyoshi et al. to support the Examiner's position that there is provided "in order to lessen the adhesion of debris to the window ..." given the fact that the only purpose attributed to it in the Abstract (which the Examiner cites as the basis for his position) is to "reduce the power up of an internal heater and power load on a slip ring and enable the temp. uniformity of a large size wafer...."

The presently claimed apparatus is directed to solving the problem of removing unwanted reaction products which adhere to the front surface (i.e., surface facing a reaction chamber) window of a receptacle housing a dielectric-barrier discharge lamp which has replaced the previously used UV mercury lamps. As discussed in the specification, at page 2, problems occur when reaction products, formed as a result of decomposition of reactants in the chamber outside the receptacle are carried by convection to the front surface of the window. These deposits build up over time and eventually peel off the window surface contaminating the workpiece processing environment. While Shi et al. disclose use of a separate heater near the window, to prevent condensation of organic polymer film on the window, they do not indicate that the claimed types of heaters should be positioned on the window, nor that it is important that the window be heated "to at least 100° C."

In view of the foregoing, no factual basis can be found for the Examiner's conclusions of obviousness, and no combination of these references based solely on their teachings could lead one of ordinary skill in the art to the invention as defined by the current claims without impermissible hindsight consideration of applicants' own disclosure. Accordingly, reconsideration and withdrawal of the outstanding rejections are in order and are now requested.

While the present application is now believed to be in condition for allowance, should the Examiner find some issue to remain unresolved, or should any new issues arise, which could be eliminated through discussions with Applicants' representative, then the Examiner is invited to contact the undersigned by telephone in order that the further prosecution of this application can thereby be expedited.

Respectfully submitted,

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